

**A FIELD PROGRAMMABLE NETWORK APPLICATION SPECIFIC
INTEGRATED CIRCUIT AND A METHOD OF OPERATION THEREOF**

ABSTRACT OF THE DISCLOSURE

The present invention provides a field programmable network application specific integrated circuit and a method of operation thereof. In one advantageous embodiment, the field programmable network application specific integrated circuit includes a media access controller and a programmable logic core having an array of dynamically configurable arithmetic logic units. The programmable logic core configured to interface with the media access controller and implement at least one application level function capable of generating meta-data. The media access controller and the programmable logic controller form at least a portion of a MP-block.